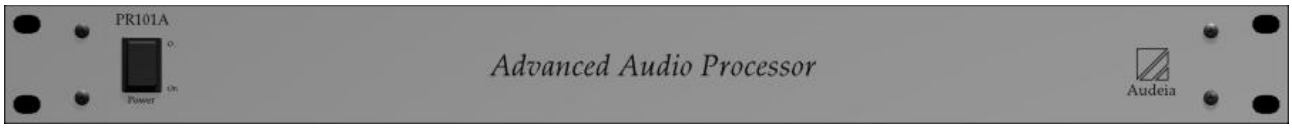
AUDEIA

PR101 /x

Advanced Audio Processor

USER MANUAL



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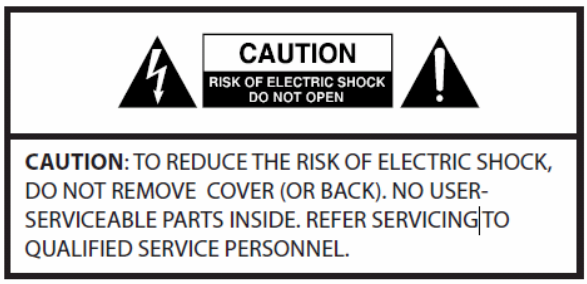
SIMBOLS


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

The lightning flash with arrowhead symbol (as the one in the left) is intended to alert the user to the presence of dangerous voltage within the product enclosure that may constitute a risk of electric shock to person.

The exclamation point within an equilateral triangle (as the one in the left), is intended to alert the user to the presence of important instruction concerning the use of the appliance.

SAFETY INSTRUCTIONS

- Read these instructions
- Keep these instructions
- Heed all warnings
- Trail all instructions
- Do not use this apparatus near water
- Clear only with dry cloth
- Install in accordance with the manufacturers instructions
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat
- No naked flame sources, such as lighted candles, should be placed on the apparatus.
- Do not block any ventilation openings.
- Do not defeat the safety purpose of the polarized or grounding type plug
- Ensures the source voltage matches the voltage of the power supply before turning ON the apparatus.
- If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at the plug, convenience receptacles, and the point where they exit from the apparatus.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- There are maybe some areas with high voltages inside, to reduce the risk of electric shock, do not remove any cover if the power supply is connected. The cover should be removed by qualified personnel only. No user serviceable parts inside.
- This apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on this apparatus.
- To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
- Only use attachments/accessories specified by the manufacturer.
- Refer all servicing to qualified personnel. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.
- Servicing is required when the apparatus has been damaged in any way, such as the power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- Make sure to connect the protective grounding to prevent any electric shock before turning ON the apparatus.
- The external wiring connected to the output hazardous live terminals requires installation by an instructed person, or the use of ready-made leads or cords.
- Never cut off the internal or external protective grounding wire or disconnect the wiring of protective grounding terminal.

DISPOSAL OF ELECTRICAL AND ELECTRONIC EQUIPMENT

- All the electrical and electronic equipment should be disposed separately from the municipal waste via collection facilities designed by the government or local authorities.
- By disposing of electrical and electronic equipment correctly you help to save valuable resources and prevent any potential negative effects on human health and the environment.
- Improper disposal of waste electrical and electronic equipment can have serious effect on the environment and human health because of the presence of hazardous substances in this type of equipment.

- The waste electrical and electronic equipment (WEEE) symbol, which show a bin that has been crossed out, indicates that electrical and electronic equipment must be collected and disposed of separately from household waste.
- Return and collection systems are available to end users. For more detailed information about the disposal of old electrical and electronics equipment, please contact your city office of waste disposal service or the shop where you purchased the equipment.

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Thank you for purchasing the AUDEIA PR101 audio processor. The PR101 is an innovative audio processor obtained after a long research within acoustical controllable rooms to obtain empirical and heuristics laws that applied in accordance to analytical and simulated elaborations give a result that is over the conventional systems. For the best use of the PR101 processor please read this user's manual carefully, and keep it in safe place for future reference.

INCLUDED ITEMS

Following are listed included items, please contact the store where you purchased this unit if any of listed items are missing or have been damaged during transportation.

- The PR101 unit Q.ty 1
- AC power cord Q.ty 1
- Warranty card Q.ty 1
- Owner's manual (this manual) Q.ty 1

ABOUT THIS MANUAL

This manual is composed of five main section: "SAFETY PRECAUTION" in witch there are safety information and instructions; "CONTENTS" with the table of contents; "INTRODUCTION" a brief description to introduce you in the use of apparatus; "INSTRUCTION" with technical information concerning installation and usage; "TECHINICAL DATA" with thecnical specifics.
Each section name is printed on the top side of the manual.

LEGAL DISCLAIMER

AUDEIA, RSS, and the other names of apparatus or components are trademarks or registered trademarks of respective owner.
No part of this manual may be reproduced or copied without write permission of AUDEIA.
Technical specification and appearance are subject to change without notice.

PRECAUTION FOR INSTALLATION AND USE

- The operating temperature should be between 4℃ and 36℃
- To prevent degrade of sound quality and malfunction do not install in places with significant vibration, exposed to direct sunlight, in extremely hot places, in places with high humidity or bad ventilation, places exposed to rain or other water.
- Do not place anything on the unit
- Do not expose to fast reduction of temperature because condensation could occur with possible damaging of the apparatus. If this happen, leave the unit for one or two hours before turning the unit on.
- Avoid installing this unit on top of any heat-generating devices as power amplifiers also to avoid condensation.
- To clean the unit, wipe it lightly with a soft dry cloth. Do not wipe with cleaning cloths, paint thinner, benzene, athyl alcohol or other agents. Tis could damage the surface.

WARRANTY

To obtain Warranty Service, the buyer should first fill out and return the enclosed Warranty Registration Card compiled in every parts within 10 days of the Purchase Date.
In case of return for any warranty service, please make sure that the product is well packed in its original shipping carton, and it can protect your unit from any other extra damage.
Please provide a copy of your sales receipt and give detail information about your return address and contact telephone number.
The warranty service is only available to the original consumer, who purchased this product directly from the retail dealer, and it can not be transferred.
The warranty does not apply to the damages to this product that occurred as the following conditions:

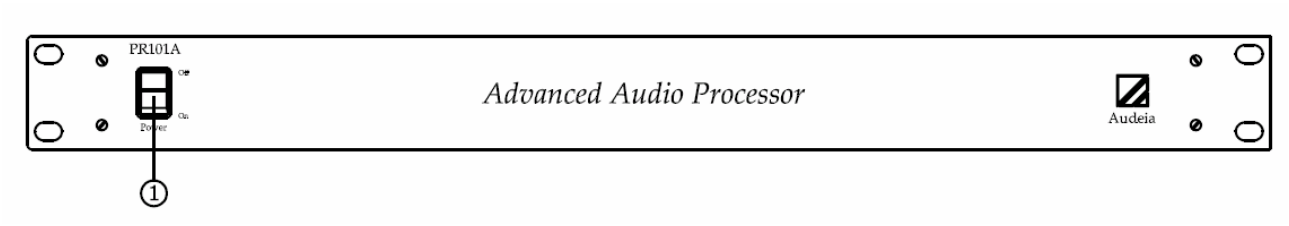
- Normal tear and wear.
- Any abuse or misuse of this product, or use not in accordance with this manual.
- The product has been altered or modified in any way.
- Damage which may have been caused either directly or indirectly by external and independent cause as other products malfunctions, shocks, and so on
- Abnormal service or repairing by not authorized technicians.
- In no event shall AUDEIA be liable for any incidental damages (if not specifically prescribed by the states laws).

OVERVIEW

The PR101/X processor is made with the target to reduce or eliminate the reverb in critical audio application. This system is configurable by the AUDEIA software: “EchoOff” that implements the RSS (Reverb Suppressor System) algorithm and program the PR101 according to specific parameter related to each application. The system has four stereo inputs and four stereo outputs (also usable as eight input and eight output mono channels). The outputs work in “collaborative” manner, all the outputs are components of a unique complex sound generation. The program generated by “EchoOff” is made according to the position of the speakers and to the acoustical properties of each ambience.

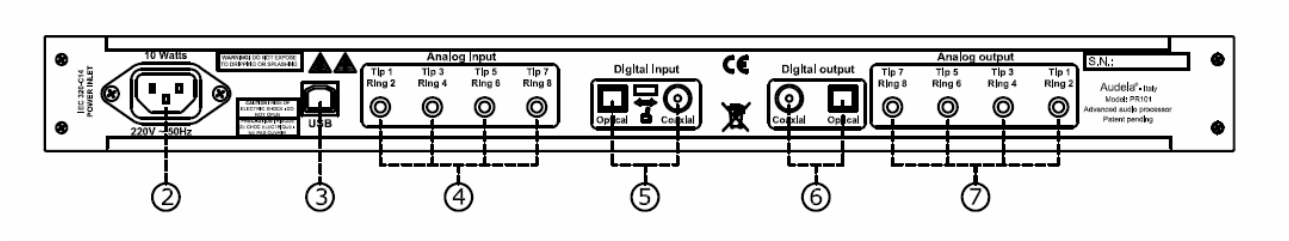
FRONT PANEL

In the front panel is located the power switch (1), it is illuminated when the system is powered and switched on.

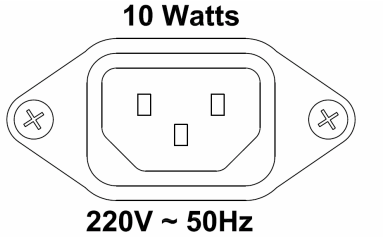


REAR PANEL

In the rear panel there are all the connection interface. Following the details:
(2) The power supply inlet;
(3) USB port to connect the device to a PC for the programming;
(4) Four jacks for audio input channels
(5) Optical and coaxial connection for digital inputs (with selection lever)
(6) Optical and coaxial connection for digital outputs.
(7) Four jacks for audio output channels.

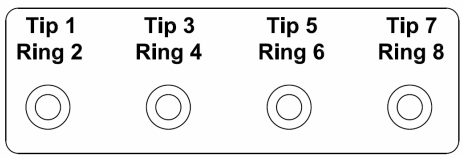


The power supply inlet and the power supply specifics change according to countries standards; until to connect the AC cord to the power source please verify that the supply voltage and frequencies printed on the rear panel are coincident with the local electrical system specifics.

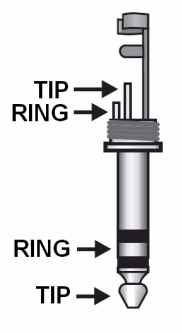


The PR101 is equipped with internal fuse (inside to the electrical transformer).

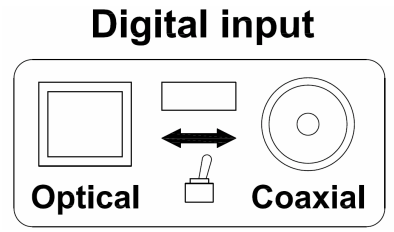
To program the device is required a set of programs and drivers normally at disposal of the authorized technicians. If needed you can try to require and authorization from AUDEIA to download the software from the website.
Concerning the audio connection, for both input and output channel there are stereo jack, 3,5mm type.



There are two channel for each jack, the numeration is alternated to Tip and Ring; Tip are odd channels, Ring are the even ones.



Concerning the digital input, is it possible to use optical or coaxial connection.



The input type change changing the position of the interposed switch (to operate the switch please use a screw-drive).

TECHNICAL SPECIFICS

GENERAL:

Power:	220V 50Hz
Power consumption:	10W max
Dimension (WxDxH):	483X240X44mm (17"x9,5"x1,7")
Weight:	3.2 kg (7.05lb)
Operating temperature range:	5-35℃/41-95℉

ANALOGICAL LINE INPUTS:

Number of channel:	4 stereo
Connector:	3.5mm TRS jack

ANALOGICAL LINE OUTPUTS:

Number of channel:	4 stereo
Connector:	3.5mm TRS jack

SPDIF INTERFACES:

Two-channel SPDIF receiver, coaxial and optical input
Two-channel SPDIF transmitter, coaxial and optical output
Optical connector type: JEITA Standard CP−1212
Coaxial connector type: PC PHONO JACK

USB INTERFACE:

Connector type: B type USB

AUDIO PERFORMANCES:

Frequency response:	20Hz – 20kHz +-0.5 dB
S/N Ratio input (Analog.):	min. 89dB
S/N Ratio input (Digital):	min. 100dB
Dynamic range output (Analog.):	min. 100dB
Dynamic range output (Digital).:	min. 140dB
Input THD+N at 5W/1kHz (Analog.):	max. 0.080%
Input THD+N at 5W/1kHz (Digital):	max. 0.080%
Output THD+N at 4V/1kHz (Analog.):	max. 0.080%
Output THD+N at 0 dBFS/1kHz (Digital):	max. 0.080%